

***Bulbophyllum gyrochilum* Seidenf. : An Addition to the Orchid Flora of India**

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Abstract

Bulbophyllum gyrochilum Seidenf. (Orchidaceae) originally described from Thailand in 1979 is reported from Meghalaya, India, as an addition to the orchid flora of India and is described as a new country record.

INTRODUCTION

During the course of critical study on *Bulbophyllum* Thou. of Northeast India, a species collected from Jaintia Hills district of Meghalaya was found to be quite interesting and after critical study, and consulting herbarium and literature was identified as *B. gyrochilum* Seidenf. This species was originally reported from Thailand where it was believed endemic (Seidenfaden, 1979). Therefore, present collection forms a new distributional record and an addition to the orchid flora of India. Detailed description along with illustrations for *B. gyrochilum* and an identification key for the 5 species of section Medusa of *Bulbophyllum* found in Northeast India is also provided.

Epiphytic; Slender creeping rhizome with small narrowly cylindric pseudobulbs. Roots thin, growing along with rhizome. Plants are pendulous, pseudobulbs erect, ca 1.4 cm long or more, sub-cylindric, distant on the pendant rhizome. Leaf linear lanceolate, about 3.7 x 0.8 cm, lower surface greyish green and upper surface green with 18 green veins. Scape very short, completely covered by sheaths. Inflorescence many flowered dense capitate, from base of pseudobulbs. Dorsal sepal 3.0 x 1.5mm, lateral sepals 3 x 2 mm length and width. Lateral sepals on their distal side with a flap with incurved edges enveloping apex of column foot. Dorsal and lateral sepals are coral-red in colour. Petals 1.5 mm - 2.0 mm, ovate acute, erose dentate, transparent white in colour. Lip strongly recurved, with many stiff hairs along its edges, dark red in colour. Column foot short, front ending with flat forward bent. Pollinia four in number, arranged in two lobes, one lobe smaller. (Fig. 1:A-I).

Flowering : September.

Distribution : India (Meghalaya) and Thailand.

Specimen studied : Jowai, Johns, 16246 (NEHU).

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Garay *et al.* (1994) have made realignment with section Medusa. The members of this section have been referred in the past to sect. Desmosanthes. According to Garay *et al.* (1994) there are four groups under sect. Medusa viz., Medusae, Odoratissimum, Brevipes and the fourth one Corallinum group. Out of the five species mentioned below *B. sterile* and *B. trichocephalum* fall under Medusae; *B. odoratissimum* and *B. congestum* under Odortissimum; and *B. gyrochilum* under Corallinum.

Section Medusa Pfitz. Pflanzenfam. 2 (6) : 179. 1888.

Plants rhizomatous, repent; pseudobulbs remote; Inflorescence densely capitate, many flowered; flowers all-directional; lateral sepals divergent at base, even caudate; Scape long or shorter.

Key to identification of Species of Section Medusa

- 1a. Inflorescence few flowered, capitate; Lateral sepals caudately drawn out at their tips, flowers greenish white *B. sterile.* (= *B. caudatum*)
- 1b. Inflorescence many flowered, capitate, lateral sepals not caudately drawn out.
- 2a. Lateral sepals 7-14 mm long. Flowers whitish yellow or creamy white.
- 2b. Lateral sepals 3.5-5 mm long, edges inrolled.
- 3a. Lateral sepals 7-8 mm long with 3-5 distinct veins, apical half with inrolled edges, apex blunt. Flowers nicelyscented, with whitish-yellow sepals, white petals and orange, red lip. *B. odoratissimum.*
- 3b. Lateral sepals 10-14 mm long with 3 veins, lip recurved, surface rugose, but no glandular hairs. Flowers creamy white *B. trichocephalum.*
- 4a. Flowers yellowish, lateral sepals 5 mm long, with very blunt apex; flowers yellow..... *B. congestum.*
- 4b. Flowers coral red colour, lateral sepals 3 mm long, their distal side with a flap with incurved edges. *B. gyrochilum.*

B. sterile (Lam.) Suresh. (*B. caudatum* Lindl.). Pseudobulb ovoid, distinct; Inflorescence capitate, flowers few. Sepals ovate, lateral sepal connate at base, lip pale purple, ovate-oblong. Distribution : India (Sikkim and Meghalaya). Flowering : June-July.

Bulbophyllum gyrochilum

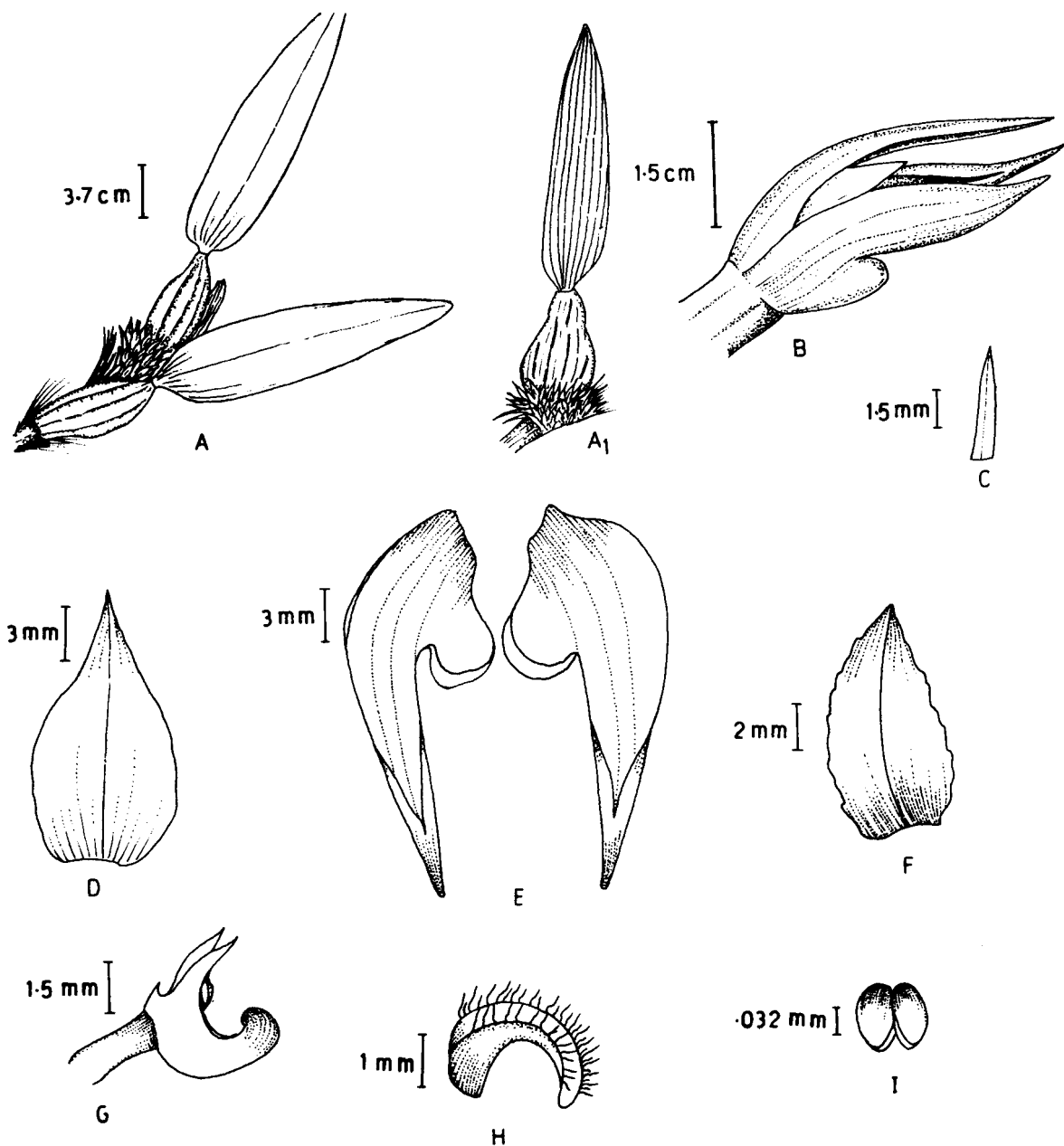


Fig. 1. *B. gyrochilum* : A, A₁. Habit; B. Flower; C. Bract; D. Dorsal Sepal; E. Lateral Sepals; F. Petal; G. Column; H. Lip; I. Pillinia.

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- B. odoratissimum** (J.E. Sm.) Lindl. Pseudobulbs sub-cylindric or oblong, leaves sessile; Inflorescence capitate, sepals lanceolate obtuse petals ovate, lip sessile at the apex of the obscure foot of the column. Two varieties are reported : var. *odoratissimum* and var. *racemosum*. Distribution : India (Sikkim, Darjeeling and Meghalaya), Nepal, Myanmar and China. Flowering : May.
- B. trichocephalum** (Schltr.) Tang & Wang. Pseudobulbs sub-cylindric; leaves linear-oblong; Inflorescence capitate, many flowered. Distribution : India (Meghalaya and Arunachal Pradesh), Thailand and Yunnan. Flowering : May-June.
- B. congestum** Rolfe. This taxon is markedly different from *B. odoratissimum* in the smaller flowers, much shorter sepals and pale yellow in colour, lip pale yellow; Inflorescence capitate, flowers many. Distribution : India (Assam, Meghalaya and Sikkim) and Myanmar. Flowering : September.
- B. gyrochilum** Seidenf. Pseudobulbs nearly cylindrical on the pendant rhizome. Leaf linear lanceolate, lower surface greyish green with 18 green veins. Lip strongly recurved with many stiff hairs along its edge, dark red in colour. Distribution : India (Meghalaya) and Thailand. Flowering : September.

Acknowledgement

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Literature cited

- Garay, L. A., F. Hamer and E.S. Siegerist. 1994. The genus *Cirrhopetalum* and the genera of the *Bulbophyllum* alliance. *Nord. J. Bot.* 14(6) : 609-649.
- Seidenfaden, G. 1979. *Orchid Genera in Thailand VIII*. - Dansk. Bot. Arkiv. 33(3) : 1-228.